



(19)

(11) Publication number:

11046782 A

Generated Document.

PATENT ABSTRACTS OF JAPAN

(21) Application number: **09210603**

(51) Intl. Cl.: **C12P 17/02 A01G 7/00 C12S 3/00**

(22) Application date: **05.08.97**

(30) Priority:

(43) Date of application
publication: **23.02.99**

(84) Designated contracting
states:

(71) Applicant: **mitsui chem inc**

(72) Inventor: **KODAMA OSAMU
TAMOGAMI SHIGERU
HARA YASUHIRO
TABATA HOMARE**

(74) Representative:

(54) PROMOTION OF PRODUCTION OF PLATE SECONDARY METABOLITE BY TREATMENT WITH RADICAL FORMER

(57) Abstract:

PROBLEM TO BE SOLVED: To promote the production of a plant secondary metabolite such as an alkaloid, a terpenoid, etc., useful as medicines, cosmetics, food additives, agrochemicals, etc. by treating a part or all of a plant body or a cultured tissue or a cell thereof with a radical former.

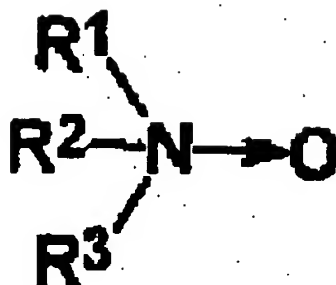
SOLUTION: A part or all of a plant body or a cultured tissue and/or a cell thereof are treated with a radical former comprising an N-oxide derivative represented by formula I [R1 and R2 are each a 1-12C alkyl, a (substituted)aryl or a (substituted)arylalkyl] or formula II (R3 is the same kind as that of R1), etc., at a concentration thereof within the range of 0.001-50 mM to thereby increase the content of a secondary metabolite contained in the plant body or the cultured tissue and/or cell thereof. Furthermore, a rice plant which is a plant of the family

Gramineae is used as the plant body to increase the content of a phytoalexin such as sakuranetin as the secondary metabolite or Taxus baccata or Taxus media, etc., which is a plant of the genus Taxus is used as the plant body to increase the content of a taxane type diterpene having anticancer actions such as a taxol as the secondary metabolite.

COPYRIGHT: (C)1999,JPO



I



II

Buy Now: [More choices...](#)Tools: Add to Work File: [Create new Work File](#)[Go](#)View: [INPADOC](#) | Jump to: [Top](#)[Go to: Derwent...](#)[Email this to a friend](#)

Title: **JP11046782A2: PROMOTION OF PRODUCTION OF PLATE SECONDARY METABOLITE BY TREATMENT WITH RADICAL FORMER**

Country: **JP Japan**

Kind: **A**

Inventor: **KODAMA OSAMU;
TAMOGAMI SHIGERU;
HARA YASUHIRO;
TABATA HOMARE;**

Assignee: **MITSUI CHEM INC**
[News, Profiles, Stocks and More about this company](#)

Published / Filed: **Feb. 23, 1999 / Aug. 5, 1997**

Application Number: **JP1997000210603**

IPC Code: **C12P 17/02; A01G 7/00; C12S 3/00;**

Priority Number: **Aug. 5, 1997 JP1997000210603**

Abstract:

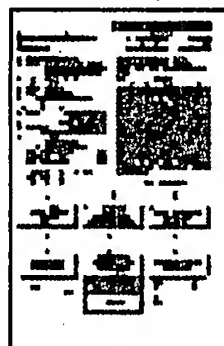
PROBLEM TO BE SOLVED: To promote the production of a plant secondary metabolite such as an alkaloid, a terpenoid, etc., useful as medicines, cosmetics, food additives, agrochemicals, etc. by treating a part or all of a plant body or a cultured tissue or a cell thereof with a radical former.

SOLUTION: A part or all of a plant body or a cultured tissue and/or a cell thereof are treated with a radical former comprising an N-oxide derivative represented by formula I [R1 and R2 are each a 1-12C alkyl, a (substituted)aryl or a (substituted)arylalkyl] or formula II (R3 is the same kind as that of R1), etc., at a concentration thereof within the range of 0.001-50 mM to thereby increase the content of a secondary metabolite contained in the plant body or the cultured tissue and/or cell thereof. Furthermore, a rice plant which is a plant of the family Gramineae is used as the plant body to increase the content of a phytoalexin such as sakuranetin as the secondary metabolite or Taxus baccata or Taxus media, etc., which is a plant of the genus Taxus is used as the plant body to increase the content of a taxane type diterpene having anticancer actions such as a taxol as the secondary metabolite.

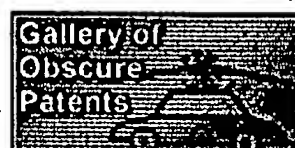
COPYRIGHT: (C)1999,JPO

Family: **None**

Other Abstract Info: **CHEMABS 130(17)222242X CHEMABS 130(17)222242X DERABS C1999-208117 DERABS C1999-208117**

[View Image](#)

1 page

[for the Gallery...](#)[Nominate this](#)